a memory circuit [ROM] having [a speakerphone operation] an algorithm executable by the microprocessor for operating the speakerphone[, the ROM connected to the microprocessor];

a first analog-to-digital converter [connected] coupled to the hands-free receive register;

a second analog-to-digital converter [connected] coupled to the hands-free transmit register;

a first programmable digital attenuator in a speech path and coupled [connected] to the microprocessor and to a speaker;

a second programmable digital attenuator in another speech path and coupled [connected] connected to the microprocessor and to a microphone;

wherein [near full duplex communication is achieved without digital signal processing] the microprocessor determines peak volume levels in both speech paths and adjusts gain levels in the speech paths in response to the peak volume levels.

C1 cont'd

2. (Amended) A speakerphone system [including], comprising:

a near full duplex portable handset [comprising:] including

an integrated circuit controller chip [comprising] having a microprocessor, an embedded hands-free receive register [connected] coupled to the microprocessor, an embedded hands-free transmit register [connected] coupled to the microprocessor, a pre-amplifier [connected] coupled to the microprocessor, and a codec having first and second programmable digital attenuators, the first programmable digital attenuator [connected] coupled to the microprocessor, and the second programmable digital attenuator [connected] coupled to the microprocessor, to the embedded hands-free transmit register,

and to the pre-amplifier[,]; wherein the microprocessor determines peak volume levels in both speech paths and adjusts the programmable digital attenuators in response to the peak volume levels and [near full] duplex communication is achieved without digital signal processing.

In claim 7, cancel "near-full" at line 1.

Add new claims 24-37, as follows:

24. (New) A speakerphone arrangement including a microphone and a speaker, comprising:

a first speech path to the speaker;

a second speech path to the microphone;

a first programmable digital level-adjustor adapted to be controlled to provide a gain adjustment along the first speech path;

a second programmable digital level-adjustor adapted to be controlled to provide a gain adjustment along the second speech path;

a logic decision circuit, coupled to the first and second programmable digital level-adjustors, adapted to determine regularly the respective peak amplitudes of signals in the first and second speech paths, and, in response, controlling the gains of the respective first and second speech paths during full duplex operation by controlling the first and second programmable digital level-adjustors.

25. (New) A speakerphone arrangement, according to claim 24, wherein the logic decision circuit is a microprocessor circuit.

26. (New) A speakerphone arrangement, according to claim 24, wherein the logic decision circuit is configured and arranged to dynamically regulate the balance of the speech paths during full duplex communication.

27. (New) A speakerphone arrangement, according to claim 24, wherein the logic decision circuit is further adapted to implement automatic gain control and thereby regulate gain proportions along at least one of the two speech paths a full duplex state.

28. (New) A speakerphone arrangement, according to claim 24, wherein the logic decision circuit is further adapted to implement automatic gain control and thereby regulate gain proportions along both speech paths a full duplex state.

C2 cont'd

29. (New) A speakerphone arrangement, according to claim 24, wherein the logic decision circuit is further adapted to operate in a plurality of full duplex substates, each substate defining a different relationship between respective gains of the first and second speech paths.

30. (New) A speakerphone arrangement, according to claim 29, wherein the substates include a first unbalanced gain relationship used in response to the speech volume of the first speech path that is less than the speech volume of the second speech path, and a second unbalanced gain relationship used in response to the speech volume of the first speech path that is greater than the speech volume of the second speech path.

31. (New) A speakerphone arrangement, according to claim 29, wherein the substates include a balanced gain relationship, first unbalanced gain relationship used in response to the speech volume of the first speech path that is less than the speech volume of the second speech path, and a second unbalanced gain relationship used in response to the speech volume of the first speech path that is greater than the speech volume of the second speech path.

32. (New) A speakerphone arrangement, according to claim 24, wherein the logic decision circuit is further adapted to implement automatic gain control using hysteresis and thereby regulate gain proportions along both speech paths a full duplex state.

C2 cont'd

33. (New) A speakerphone arrangement, according to claim 24, wherein the logic decision circuit is further adapted to operate in a plurality of full duplex substates, each substate defining a different relationship between respective gains of the first and second speech paths, one of the substates include a balanced gain relationship, another substate including a first unbalanced gain relationship used in response to the speech volume of the first speech path that is less than the speech volume of the second speech path, and another substate including a second unbalanced gain relationship used in response to the speech volume of the first speech path that is greater than the speech volume of the second speech path.

34. (New) A speakerphone arrangement, according to claim 24, wherein the logic decision circuit is further adapted to operate in a plurality of full duplex substates, with

the logic decision circuit transitioning between substates in response to: the volume levels in the first and second speech paths, and the current substate.

35. (New) A speakerphone arrangement including a microphone and a speaker, comprising:

a first speech path to the speaker;

a second speech path to the microphone;

a first level-adjustment means adapted to be controlled to adjust the volume along the first speech path;

a second level-adjustment means adapted to be controlled to adjust the volume along the second speech path;

means for determining regularly the respective peak amplitudes of signals in the first and second speech paths, and in response controlling the gains of the respective first and second speech paths during full duplex operation by controlling the first and second level-adjustment means.

C2 cont'd

36. (New) A method of controlling an audio signal level in a portable communications device having a first speech path to a speaker and a second speech path to a microphone, comprising:

determining regularly the respective peak amplitudes of signals in the first and second speech paths; and

in response, controlling the gains of the respective first and second speech paths during full duplex operation.